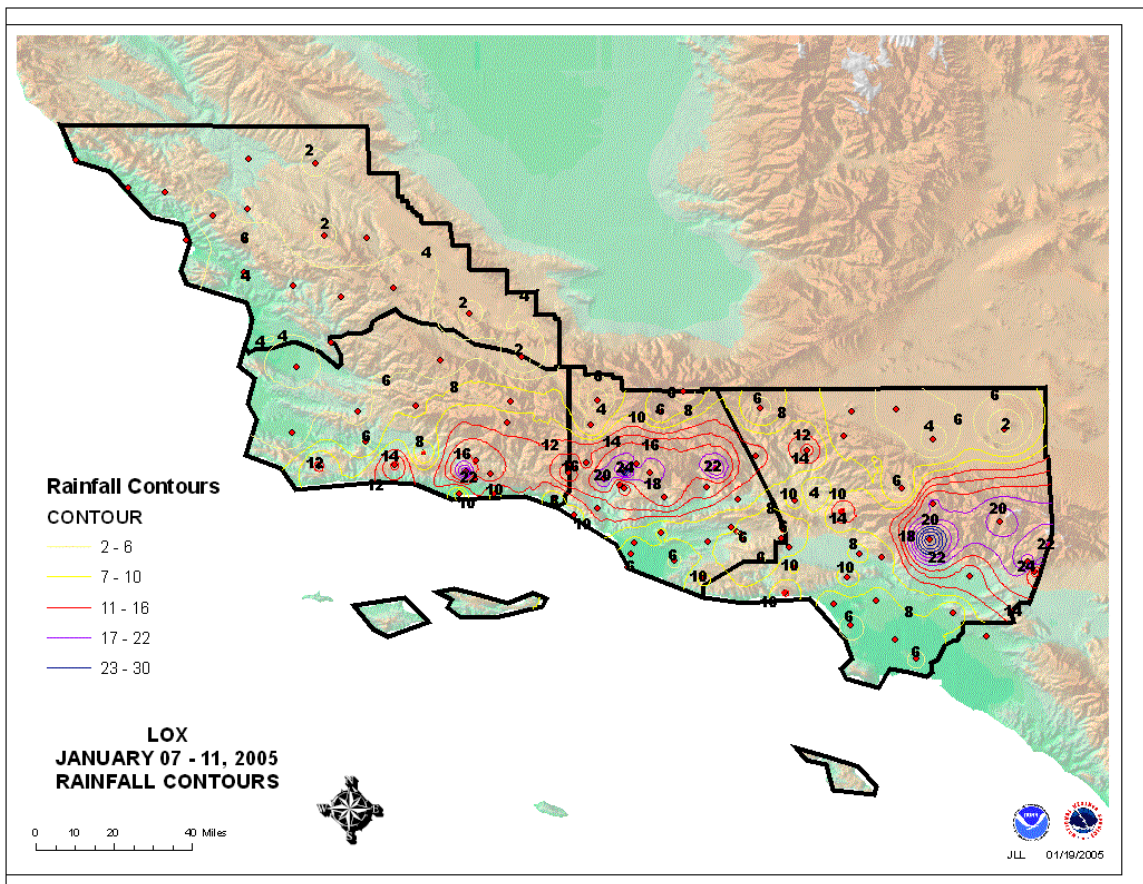


Event Summary

NWS Los Angeles/Oxnard

7-11 January 2005 Heavy Rain and Flooding



Summary

Extreme rainfall over the five day period from January 7th through January 11th provided southwestern California with precipitation tallies more associated with snowfall from blizzards in New England (i.e. the recent Blizzard of January '05). As shown by the contours in the image above, a general 5 to 10 inches of rain fell at low elevations of Santa Barbara, Ventura and Los Angeles Counties, while the mountains averaged between 12 and 24 inches. Rainfall maxima of 24 to just over 30 inches fell across the southern portions of the mountains in the region

where upslope flow was maximized. In contrast, the northern reaches of the mountains had much lesser amounts of rain...generally 4 to 6 inches...thanks in large part to most of the moisture having been wrung out on the southern slopes. The table below highlights maximum rainfall amounts by geographical area. Note that all of the maximum amounts, especially in the mountains and hills, were on south-facing or ridge top locations. This is typical for storm systems that provide a prolonged period of moderate to strong southerly moist flow in the low levels of the atmosphere. Moist air being forced upward over the steep, south-facing mountain slopes results in a very efficient and often excessive production of rain.

Maximum Rainfall Amounts by Geographical Location 7-11 January 2005

Mountains

Location (County)	Rainfall (in)	Elevation (ft)	Aspect
Opids Camps (LA)	31.61	4320	South
Nordhoff Ridge (Ventura)	26.90	4100	Ridge
San Marcos Pass (SBA)	24.65	2300	Ridge
Tanbark (LA)	24.10	2600	South
Dough Flat (Ventura)	22.48	2925	South
Mt. Baldy Fire Station (LA)	22.11	4300	South
Crystal Lake (LA)	21.49	5380	South/Ridge
Matilija Dam (Ventura)	20.83	1100	South

Valleys/Santa Monica Mountains Recreation Area

Location (County)	Rainfall (in)	Elevation (ft)	Aspect
Santa Paula (Ventura)	17.60	810	South
Fillmore (Ventura)	14.94	580	South
Claremont (LA)	13.01	1645	South
Santa Fe Dam (LA)	12.92	500	Flat
Ojai (Ventura)	12.50	765	Flat
Malibu Hills (LA)	12.24	1575	South
Lake Casitas (Ventura)	12.17	567	South
Piru (Ventura)	11.57	614	Flat
Beverly Hills (LA)	11.45	1260	South/Ridge
Newhall (LA)	11.18	1765	Flat
Woodland Hills (LA)	10.33	1020	Flat
Moorpark College (Ventura)	10.03	750	Southwest

Coast

Location (County)	Rainfall (in)	Elevation (ft)	Aspect
Santa Barbara (SBA)	9.07	80	Flat
La Conchita (Ventura)	8.00	20	Flat (South)
Carpinteria (SBA)	7.92	125	Flat (South)
Oxnard (Ventura)	7.33	43	Flat
L.A. Downtown (LA)	6.82	185	Flat
Santa Monica (LA)	6.67	175	Flat

Storm Damage

Numerous mudslides, areas of flash flooding, and even some river flooding occurred as a result of the excessive rain. Many popular commuting routes on canyon roads through the Santa Monica Mountains and San Gabriel Mountains were washed out or covered by mudslides and debris flows. In hard hit Ventura County, portions of the Ventura and Santa Clara Rivers flooded and the Sespe Creek saw its historical flood of record. River flooding, mudslides and landslides closed numerous roads including highways 126, 150, 33, 23 and 154, as well as the Pacific Coast Highway [101] which was closed by both the Ventura River flood and the mudslides at La Conchita. Several tributaries of the Santa Clara River near Santa Paula experienced significant flooding impacting Highway 126 and adjacent agricultural fields and citrus fields. Initial evaluation of several of these tributaries, including Haines Barranca, Haun Creek, Todd Barranca, Elsworth Barranca and Hopper Creek, put the flow rates at or near 50-year frequencies. Communities such as Ojai, Piru, and Fillmore were isolated by road closures. In Santa Barbara County, Highway 154 north of Santa Barbara toward San Marcos Pass had to be closed for an extended period of time due to road damage and mudslides. Extensive urban flooding was also observed in Palmdale. CALTRANS estimates the cost of road repairs to be in excess of 30 million dollars.

There were 22 deaths directly and indirectly related to the storm according to county emergency management. Several of the deaths were attributed to automobile accidents that were the result of wet road conditions. Ten of the deaths were a result of a landslide that buried 13 homes and damaged 19 others in the La Conchita community in extreme western Ventura County. There were reports of many other homes that sustained damage from overflowing rivers and streams, or landslides in Santa Barbara, Ventura and Los Angeles counties.

Total crop damage in Ventura County alone is estimated to be near 52 million dollars according to the county Office of Emergency Services.

For a more in-depth analysis of this event and a broader scope its impacts across California, please see the [Event Summary](#) written by the California-Nevada River Forecast Center.

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Special thanks go to Jayme Laber for producing the map of rainfall totals and providing much of the information in the storm damage summary.

